

Sugar Maple Forest

State Rank: S4

Community Description

The canopy is dominated by sugar maple, with white ash a frequent associate in southern or central Maine. Other associated hardwood species include yellow birch and striped maple. Beech may be present but is less abundant than in Beech - Birch - Maple Forests. Conifers are usually sparse. The closed-canopy forest has little to moderate shrub cover, moderate to dense herb cover, and may have local carpets of sugar maple seedlings. Characteristic shrubs include alternate-leaved dogwood and red-elderberry. Typical herbs of this type, which are scarce or absent from beech-birch-maple forests, include jack-in-the-pulpit, doll's eyes, round-leaved violet, grape fern, zig-zag goldenrod, spikenard, false Solomon's seal, and long-stalked sedge.

Soil and Site Characteristics

These northern hardwood forests occur at moderate elevations on slightly enriched, moderately drained soils ~ often silt loams derived from pelite or other subacidic bedrock. They may occur as inclusions within typical northern hardwood forests, or, in northern Maine, they may occur over larger areas (hundreds of acres) and be the locally dominant northern hardwood forest.

Diagnostics

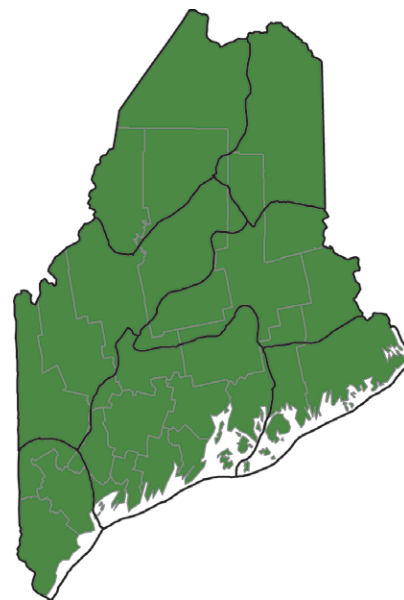
Sugar maple is dominant or co-dominant (>50% cover) with yellow birch or white ash. Conifers and beech each form less than 25% cover. The herbaceous layer includes at least several species indicative of moderate soil enrichment,

as noted above, but lacks richer site species characteristic of Maple - Basswood - Ash Forest.

Similar Types

These forests are intermediate in nutrient regime and composition between Maple - Basswood - Ash Forests and Beech - Birch - Maple Forests. Maple - Basswood - Ash Forests are typically small-patch types in ravines or coves, with more restrictive rich-soil indicators such as basswood, maidenhair fern, blue cohosh, broad-leaved sedge, plantain-leaved sedge, and Braun's holly fern. Beech - Birch - Maple Forests typically contain as much if not more beech than sugar maple and lack the diversity and abundance of rich site indicators. Beech - Birch - Maple Forests

Location Map



- Community is known from this Ecoregion
- Community may occur in this Ecoregion
- Bailey's Ecoregion
- County



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often occur on drier sites (e.g., ridgetops) and/or more acidic soils (e.g., granitic types in Downeast Maine).

Conservation, Wildlife, and Management Considerations

This forest type has been extensively harvested and managed in northern Maine. Most management techniques diverge from the natural gap pattern, which is at the scale of single trees or small groups of trees. Large (>100 acres) examples reflecting only natural disturbance are scarce statewide, and intact examples in central and southern Maine tend to be smaller and more isolated.

This type provides nesting habitat for a large number of passerine bird species, such as the black-throated green warbler, rose-breasted grosbeak, scarlet tanager, ovenbird, and a large proportion of the global population of black-throated blue warblers.

Distribution

New England - Adirondack Province and Laurentian Mixed Forest Province. Extends east, west, and north from Maine.

Landscape Pattern: Small to Large Patch

Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Canopy

American beech
Sugar maple*
White Ash*
Yellow birch

Sapling/shrub

Alternate-leaved dogwood
Red Elderberry
Striped maple*
Sugar maple*
Yellow birch

Herb

Christmas fern
Doll's eyes*
Jack in the pulpit
Round-leaved violet
Sarsaparilla
Shining clubmoss*
Spikenard*
Striped maple

Associated Rare Plants

Autumn coral-root
Broad beech fern
Cut-leaved toothwort
Nodding pogonia
Tall white violet

Associated Rare Animals

Early hairstreak

Examples on Conservation Lands You Can Visit

- Deboullie Ponds Public Lands - Aroostook Co.
- Squa Pan Public Lands - Aroostook Co.
- White Mountain National Forest - Oxford Co.